DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 0013610
Wayne County
GDOT District 5 - Jesup
SR 38/US 84 @ Little McMullen Creek
in Jesup – Bridge Replacement

OFFICE Design Policy & Support

DATE 05/25/2018

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED CONCEPT REPORT**

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3
Albert Shelby, Director of Program Delivery
Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator
Kim Nesbitt, Program Delivery Administrator
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Eric Duff, State Environmental Administrator
Bill DuVall, State Bridge Engineer
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Monica Flournoy, State Materials Engineer
Patrick Allen, State Utilities Engineer
Benny Walden, Statewide Location Bureau Chief
Brad Saxon, District Engineer
Troy Pittman, District Preconstruction Engineer
Dallory Rozier, District Utilities Engineer
Brian McHugh, Project Manager
BOARD MEMBER - 1st Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
LIMITED SCOPE PROJECT CONCEPT REPORT

Project Type: Bridge Replacement
P.I. Number: 0013610
GDOT District: 5
County: Wayne
Federal Route Number: US 84
State Route Number: SR 38
Project Number: N/A

This project proposes to replace the twin bridges on SR 38/US 84 over Little McMillan Creek in Jesup, GA located in Wayne County.

**Concept Report updated to address Office Head Review comments

Submitted for approval:

Umit Sayhan, PE, ARCADIS, U.S. — 12/20/2017

Kimberley W. Nesbitt — Date 12/29/17

State Program Delivery Engineer — Date

Brian T. McGuire — 12/21/2017

GDOT Project Manager — Date

*Recommendations on File

Recommendation for approval:

*Eric Duff/KLP — 1/4/2018
State Environmental Administrator — Date

*Christina Barry/KLP — 1/18/2018
For State Traffic Engineer — Date

*Bill DuVall/KLP — 3/24/2018
State Bridge Engineer — Date

*Brad Saxon/KLP — 1/12/2018
District Engineer — Date

☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).

☒ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

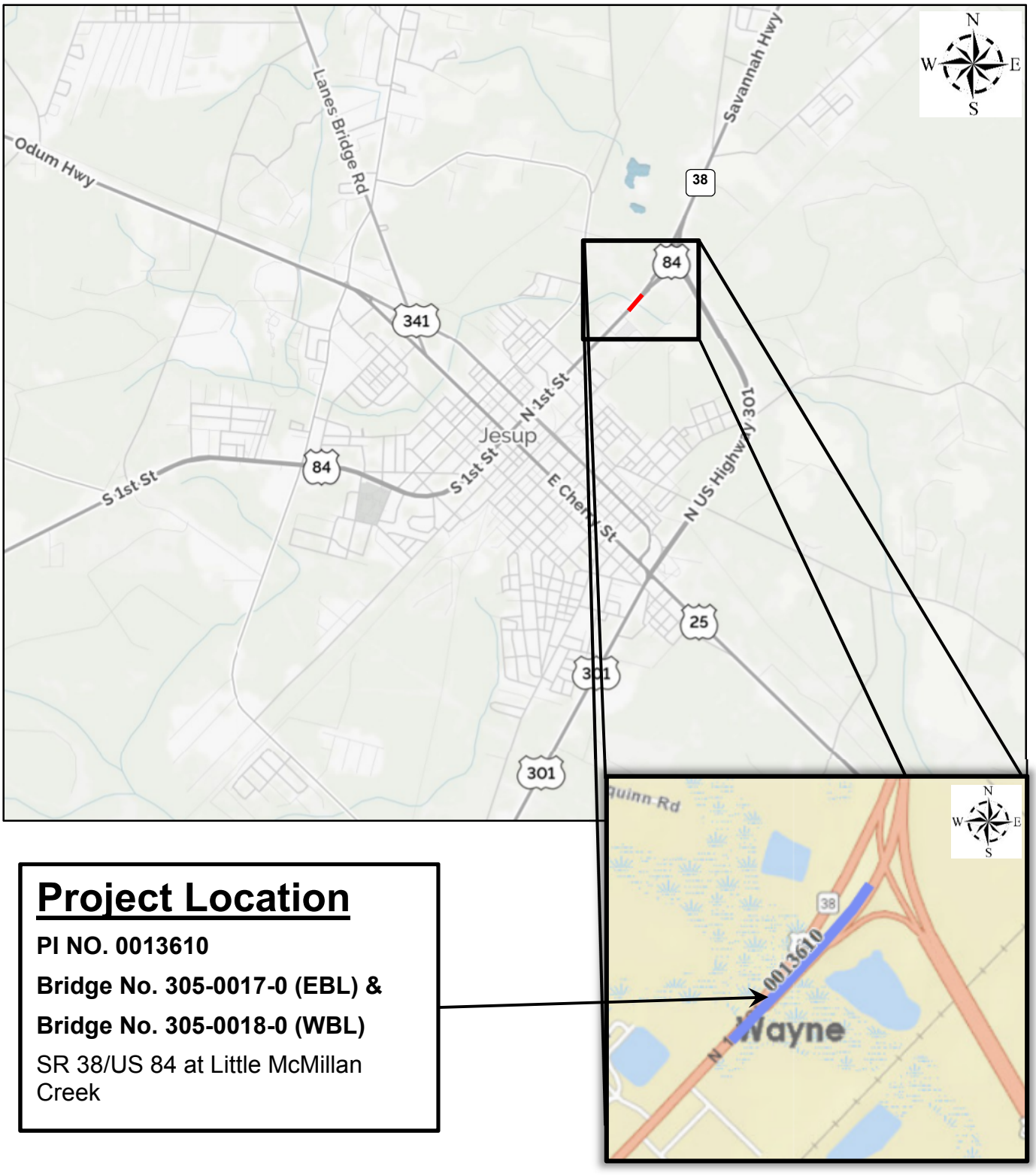
Cynthia L. VanDyke — 1-10-18
State Transportation Planning Administrator — Date

Approval:

Concur: — 5/18/18
GDOT Director of Engineering — Date

Approve: Margaret B. Purkle — 5/18/18
GDOT Chief Engineer — Date

PROJECT LOCATION



Project Location

PI NO. 0013610

Bridge No. 305-0017-0 (EBL) &

Bridge No. 305-0018-0 (WBL)

SR 38/US 84 at Little McMillan Creek

PLANNING & BACKGROUND DATA

Project Justification Statement: This project consists of two bridges on SR 38 (US 84) over Little McMillan Creek in Wayne County. Both of these bridges are on the National Highway System.

The bridge on SR 38 EBL over Little McMillan Creek, Structure ID 305-0017-0, was built in 1971. The bridge consists of eight (8) spans of Reinforced Concrete Deck Girders (RCDG's) on concrete caps with concrete piles. A structural analysis shows that there is no reserve capacity in the superstructure of this bridge. This bridge was designed using an HS-20 vehicle, which is below current design standards. The overall condition of this bridge would be classified as satisfactory. The deck is in good condition. The superstructure is in satisfactory condition with minor deflection cracking in the RCDG's and spalls with exposed rebar. The substructure is in good condition. This bridge is classified as having an unknown foundation and therefore could be at risk for scour.

The bridge on SR 38 WBL over Little McMillan Creek, Structure ID 305-0018-0, was built in 1957. The bridge consists of eight (8) spans of Reinforced Concrete Deck Girders (RCDG's) on concrete caps with concrete columns. This structure is currently posted for weight restrictions. This bridge was designed using an HS-20 vehicle, which is below current design standards. This bridge is classified as structurally deficient and is in poor condition. The deck is in poor condition with moderate to heavy cracking and spalls with exposed rebar. The superstructure is in poor condition with heavy deflection cracks in the RCDG's and spalls with exposed rebar. The substructure is in fair condition with minor cracking and spalls with exposed rebar in the caps. This bridge is classified as having an unknown foundation and therefore could be at risk for scour.

Due to the structural deficiency and weight restrictions of bridge 305-0018-0, the structural integrity of both bridges pertaining to their design vehicles, and the unknown foundation of both bridges, replacement of these bridges is recommended.

Existing conditions: SR 38/US 84 over Little McMillan Creek is 4-lane urban principal arterial divided highway that runs east-west, located just northeast of Jesup, Wayne County, Georgia. SR 38 on the east approach to the bridges is a four lane highway with 14-foot flush median. SR 38 then divides into two bridges, 2 travel lanes each, over Little McMillan Creek and stays divided until after the SR 38/US 84 and US 301 interchange, where the two highways merge to a four lane highway with 14-foot flush median. The eastbound bridge (ID 305-0017-0) is 208' long and 46.5' wide. The westbound bridge (ID 305-0018-0) is 200' long and 48' wide.

Other projects in the area:

PI No.	Project Description	Construction Funding Year
0012503	SR 38 @ CS 603/West Orange St	2021
0012513	SR 23/US 301 Sidewalk	2021
0013719	SR 38/ US 84 @ Doctors Creek	2020
0013944	SR 169 @ Goose Creek	2020
0015724	Transportation Improvements in Jesup-Phase II	2020

MPO: N/A **TIP #:** N/A

Congressional District(s): 1

Federal Oversight: ☐PoDI ☒Exempt ☐State Funded ☐Other

Projected Traffic: ADT 24 HR T: 21%
Current Year (2017): 13,000 Open Year (2020): 13,350 Design Year (2040): 14,750
Traffic Projections Performed by: Arcadis Inc.
Date approved by the GDOT Office of Planning: March 23, 2018

Functional Classification (Mainline): Urban Principal Arterial

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:

Warrants met: ☐None ☒Bicycle ☒Pedestrian ☐Transit
Pedestrian Warrant #1: Martha Rawls Smith Elementary School within 0.5 mile, Park/Recreation/Conservation areas located northeast and northwest quadrants of the project and proposed and existing commercial

development areas including Walmart on the south side of the project area based on Heart of Georgia Altamaha Regional Commission 2015 Existing and Future Land Use maps.

Bicycle Warrant #1 and 2: SR38 is part of the regional bike route. See GDOT DPM Section 9 Figure 9.3 and Regional Bicycle/Pedestrian Plan, 2005 by Heart of Georgia Altamaha Regional Development Center.

Pavement Evaluation and Recommendations

Preliminary Pavement Evaluation Summary Report Required? ☒No ☐Yes

Preliminary Pavement Type Selection Report Required? ☒No ☐Yes

Feasible Pavement Alternatives: ☒HMA ☐PCC ☐HMA & PCC

DESIGN AND STRUCTURAL

Description of the proposed project: This project is located on State Route 38 (US 84) over Little McMillan Creek in Jesup, Georgia, Wayne County. Proposed bridges over Little McMillan Creek will be about 230-ft long by 47-ft wide for both the eastbound and westbound side. The proposed baselines will remain the same and the proposed profile will remain close to existing profiles. The proposed design speed is 45 mph. The total length of the project is approximately 1000 feet (0.2 miles). One bridge will be constructed at a time, while the other bridge will be utilized for one lane of traffic in each direction during construction.

Major Structures:

Structure ID	Existing	Proposed
305-0017-0	SR 38/US 84 EB over Little McMillan Creek. The existing 208-foot-long bridge carries two lanes of traffic eastbound. A 2-foot gutter at the inside shoulder side with a 4-foot sidewalk and a 8-foot outside shoulder with a 2-foot gutter and 4-foot sidewalk. The sufficiency rating is 79.4	The existing bridge will be replaced. The proposed 230-foot-long bridge will carry two lanes of traffic eastbound. Two 12-foot travel lane with a 4-foot rural inside shoulder and a 8-foot outside bike lane with 2-foot gutter and 5.5-foot sidewalk.
305-0018-0	SR 38/US 84 WB over Little McMillan Creek. The existing 200-foot-long bridge carries two lanes of traffic westbound. A 2-foot gutter at the inside shoulder side with a 6-foot sidewalk and a 8-foot outside shoulder with a 2-foot gutter and 6-foot sidewalk. The sufficiency rating is 48.9	The existing bridge will be replaced. The proposed 230-foot-long bridge will carry two lanes of traffic westbound. Two 12-foot travel lane with a 4-foot rural inside shoulder and a 8-foot outside bike lane with 2-foot gutter and 5.5-foot sidewalk.

Mainline Design Features: SR 38/US 84

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	**4**		**4**
- **Lane Width(s)**	**12'**	**11'-12'**	**12'**
- **Median Width & Type**	**14-foot flush at the west Raised grass western approach 44' Depressed eastern approach**	**N/A**	**Varies 22-foot to 35-foot Depressed western approach 44' Depressed eastern approach**
- **Outside Shoulder Width**	**10' Urban** 12' Rural – 10' paved (EB Eastern Approach)**	**N/A**	**10' Urban** 12' Rural – 10' paved (EB Eastern Approach)**
- **Outside Shoulder Slope**	**2% (on bridge) 6% (EB Eastern Approach)**	**N/A**	**2% (on bridge) 6% (EB Eastern Approach)**
- **Inside Shoulder Width**	**N/A at the bridge and western approach 2' paved at eastern approach**	**N/A**	**4' at the bridge 6' with 2' paved at the eastern and western approaches**
- **Sidewalks (on Bridge)**	**4' & 6'**	**N/A**	**5.5' (only outside shoulder)**
- Auxiliary Lanes	**N/A**		**N/A**
- **Bike Lanes**	**8'**	**N/A**	**8'**
Posted Speed	**45 MPH**		**45 MPH**
Design Speed	**45 MPH**	**45-55 MPH**	**45 MPH**
Min Horizontal Curve Radius	**6985'**	**643'**	**6985'**
Maximum Superelevation Rate	**unknown**	**4%**	**2%**
Maximum Grade	**unknown**	**5%**	**5%**
Access Control	**Permit**	**Permit**	**Permit**
Design Vehicle	**unknown**		**WB-67**
Pavement Type	**HMA**		**HMA**

*According to current GDOT design policy if applicable
** Existing section does not have sidewalk. See the proposed sidewalk locations in concept layout.

Is the project located on a NHS roadway? ☐ No ☒ Yes

Design Exceptions to FHWA/AASHTO controlling criteria anticipated: None

Design Variances to GDOT Standard Criteria anticipated: Median width and type at the western end

Lighting required: ☒ No ☐ Yes

Off-site Detours Anticipated: ☒ No ☐ Undetermined ☐ Yes

Transportation Management Plan [TMP] Required: ☐ No ☒ Yes

If Yes: Project classified as: ☒ Non-Significant
TMP Components Anticipated: ☒ TTC

INTERCHANGES AND INTERSECTIONS

Major Interchanges/Intersections: SR38/US84 and US 301

Intersection Control Evaluation (ICE) Required: ☒ No ☐ Yes

Roundabout Peer Review Required: ☒ No ☐ Yes ☐ Completed – Date:

UTILITY AND PROPERTY

Railroad Involvement: None

Utility Involvements: AT&T, Ga. Power-Dist., Comcast

SUE Required: ☒ No ☐Yes

Public Interest Determination Policy and Procedure recommended? ☒ No ☐ Yes

Right-of-Way: Existing width: 125-200 ft. Proposed width: 125-200 ft.
Required Right-of-Way anticipated: ☒ No ☐ Yes ☐ Undetermined
Easements anticipated: ☐ None ☒ Temporary ☐ Permanent ☐ Utility ☐ Other

Anticipated total number of impacted parcels: 2
Displacements anticipated: Businesses: 0
Residences: 0
Other: 0
Total Displacements: 0

Impacts to USACE property anticipated? ☒ No ☐ Yes ☐ Undetermined

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: none

Context Sensitive Solutions Proposed: none

ENVIRONMENTAL & PERMITS

Anticipated Environmental Document:

NEPA: ☐ PCE ☒ CE ☐ EA-FONSI ☐ EIS
GEPA: ☐ Type A ☐ Type B ☐ EER ☐ None

Level of Environmental Analysis:

☒ The environmental considerations noted below are based on preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.

☐ The environmental considerations noted below are based on the completion of resource identification, delineation, and agency concurrence.

Water Quality Requirements:

MS4 Permit Compliance – Is the project located in a MS4 area? ☒ No ☐ Yes

Is Non-MS4 water quality mitigation anticipated? ☒ No ☐ Yes

Environmental Permits, Variances, Commitments, and Coordination anticipated:

Permit/Variance/Commitment/ Coordination Anticipated	No	Yes	Remarks
1. U.S. Coast Guard Permit	☒	☐	
2. Forest Service/NPS	☒	☐	
3. CWA Section 404 Permit	☐	☒	Potentially a Nationwide Permit 14 or 3a
4. Tennessee Valley Authority Permit	☒	☐	
5. 33 USC 408 Decision	☒	☐	
6. Buffer Variance	☒	☐	All impacts should be exempt
7. Coastal Zone Management Coordination	☐	☒	
8. NPDES	☐	☒	
9. FEMA	☐	☒	The project crosses a Zone AE floodplain. It is anticipated that the project will not produce a rise in floodplain level.
10. Cemetery Permit	☒	☐	
11. Other Permits	☒	☐	

12. Other Commitments	☐	☒	Special Provision 107.23H Protection of Species
13. Other Coordination	☐	☒	Formal or Informal Section 7 coordination with USFWS.

NEPA/GEPA Comments & Information:

NEPA/GEPA: The anticipated environmental document is Categorical Exclusion (CE).

Ecology: Desktop survey indicates that the project crosses Little McMillan Creek and that there are wetlands east and west of the existing roadway.

There are ten (10) federal and/or state protected species with potential to occur within the project corridor. These species are swallow-tailed kite, dwarf witch-alder, hooded pitcherplant, wood stork, eastern indigo snake, gopher tortoise, Atlantic sturgeon, shortnose sturgeon, Altamaha spinymussel, and hairy rattleweed. The project is within the designated critical habitat for Altamaha spinymussel. An aquatic survey will not be needed because presence/absence of species can be evaluated by assessing habitat.

An ecological survey, protected species survey, and ecology Assessment of Effects Report (AOER) will be needed.

History: The desktop survey did not identify any potential historic resources. However, a Historic Resources Survey Report would be prepared with Georgia State Historic Preservation Office (SHPO) concurrence needed. Project effects will be documented in a cultural resource Assessment of Effects (AOE).

Archeology: Due to the location of the project, Native American, Pre-Civil War, and Civil War era archaeological resources may be present within the project corridor. An archaeological survey will be conducted and a Phase I Archaeological Survey Report with SHPO concurrence will be needed. Project effects will be documented in an AOE.

Air Quality:

Is the project located in an Ozone Non-attainment area? ☒ No ☐ Yes
Is a Carbon Monoxide hotspot analysis required? ☒ No ☐ Yes

The proposed project is included in the State Transportation Improvement Program (STIP) FY 18-21, as 0013610.

Noise Effects: This project meets the criteria for a Type III project established in 23 CFR Part 772 and does not require an analysis for highway traffic noise impacts.

Public Involvement: A Public Information Open House will not be required, as the bridge replacement will not require a detour, there are only 2 impacted parcel making this project minor, and there is no public controversy.

Major stakeholders: Wayne County; City of Jesup; Business Owners in Jesup; Traveling Public

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Project Meetings:

Project Activity	Party Responsible for Performing Task(s)
Concept Development	ARCADIS, US
Design	ARCADIS, US
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT
Utility Relocation (Construction)	Utility Company
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	CONTRACTOR
Providing Detours	CONTRACTOR
Environmental Studies, Documents, & Permits	ARCADIS, US
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

Other coordination to date:
Concept Team Meeting: December 19, 2017

Project Cost Estimate and Funding Responsibilities:

	PE Activities					
	PE Funding	Section 404 Mitigation	ROW	Reimbursable Utilities	CST*	Total Cost
Funded By	GDOT	GDOT	GDOT	GDOT	GDOT	
$ Amount	$500,000	$18,840***	$250,000.00	$88,000.00	$6,687,023.52	$7,543,863.52
Date of Estimate	2016	12/14/17	12/14/17**	11/17/17	12/10/17	

*CST Cost includes: Construction, Engineering and Inspection, Contingencies and Liquid AC Cost Adjustment.
** Submitted to GDOT
*** 534-foot stream credits at $20 and 3.12 acres wetland credits at $2500. Provided by Lisa Westbury at OES

ALTERNATIVES DISCUSSION

Preferred Alternative: This alternative proposes to keep the same alignments of SR 38/US 84 at Little McMillan Creek and replace the twin bridges in their existing locations. This alternative will construct one bridge at a time, while utilizing the other during construction to maintain traffic through the area.			
Estimated Property Impacts:	**2**	**Estimated Total Cost:**	**$7.5 Million**
Estimated ROW Cost:	**$250,000**	**Estimated CST Time:**	**24 Months**
Rationale: This alternative was chosen because it would keep the existing alignments, reduce the roadway length required for the approaches, and reduces the need for required Right-of-Way to temporary easement, reducing any addition environmental impacts.			

No-Build Alternative: This alternative proposes that the SR 38/US 84 twin bridges at Little McMillan Creek not be replaced.			
Estimated Property Impacts:	**None**	**Estimated Total Cost:**	**$0**
Estimated ROW Cost:	**$0**	**Estimated CST Time:**	**None**
Rationale: This alternative was not chosen as it would not meet the project justification statement for this project.			

Alternative 2: This alternative proposes to keep the same alignments of SR 38/US 84 at Little McMillan Creek and replace the twin bridges in their existing locations. This alternative will construct both bridges at the same time. This alternative requires an off-site detour of approximately 4 miles.			
Estimated Property Impacts:	**2**	**Estimated Total Cost:**	**$7.0 Million**
Estimated ROW Cost:	**$250,000**	**Estimated CST Time:**	**18 Months**
Rationale: This alternative was not chosen because it would require an off-site detour. An off-site detour would be an inconvenience to local travelers, and create a longer route for emergency vehicles.			

Alternative 3: This alternative proposes to replace the existing twin bridges with one proposed bridge. This alternative would shift the alignments each to the center of SR 38/US 84. This alternative would require stage construction of the bridge in order to maintain traffic in the area during construction. This alternative might require another bridge replacement due to the realignment east of Little McMillan Creek for SR 38 eastbound over the SR 38 exit ramp to US 301.			
Estimated Property Impacts:	**2**	**Estimated Total Cost:**	**$9.0 Million**
Estimated ROW Cost:	**$250,000**	**Estimated CST Time:**	**36 Months**
Rationale: This alternative was not chosen because of the required staged construction of a single bridge and the additional approach length and additional bridge replacement required for the alignments to tie back into the existing roadway.			

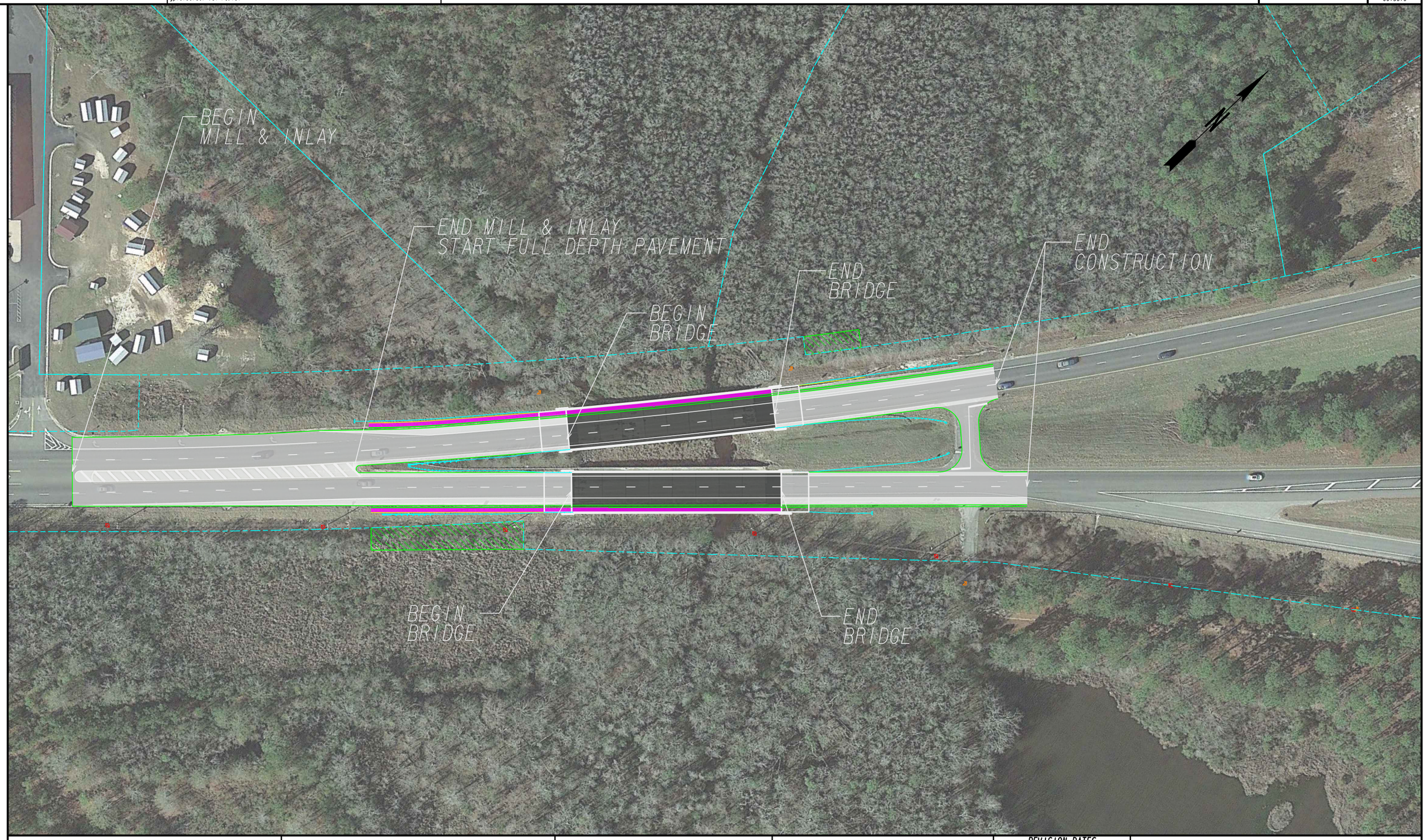
Alternative 4: This alternative proposes to shift the eastbound bridge to the south, and keep the existing alignment on the westbound bridge. This alternative would keep two bridges and four travel lanes open during construction.			
Estimated Property Impacts:	**1**	**Estimated Total Cost:**	**$8.2 Million**
Estimated ROW Cost:	**$500,000**	**Estimated CST Time:**	**24 Months**
Rationale: This alternative was not chosen as it would require additional approach length for the eastbound bridge in order to tie back into the existing roadway. This alternative requires additional Right-of-Way, and would have additional environmental impacts.			

Comments/Additional Information:

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Prefered Alternative Concept Layout
2. Prefered Alternative Typical sections
3. Prefered Alternative Cost Estimates
4. Design Traffic Projection
5. SIA Bridge Inventory Data
6. Meeting Minutes

5/1/2018 1:37:36 PM CDirton	GPLOT-V8 gplotborder-V8i-PO.tbl	0013610_CONCEPT-Alt1_Layout.dgn	GDOT — P.I. No. 0013610



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

ARCADIS Design & Consultancy for natural and built assets

PROGRAM DELIVERY

SCALE IN FEET
0 50 100 200

REVISION DATES

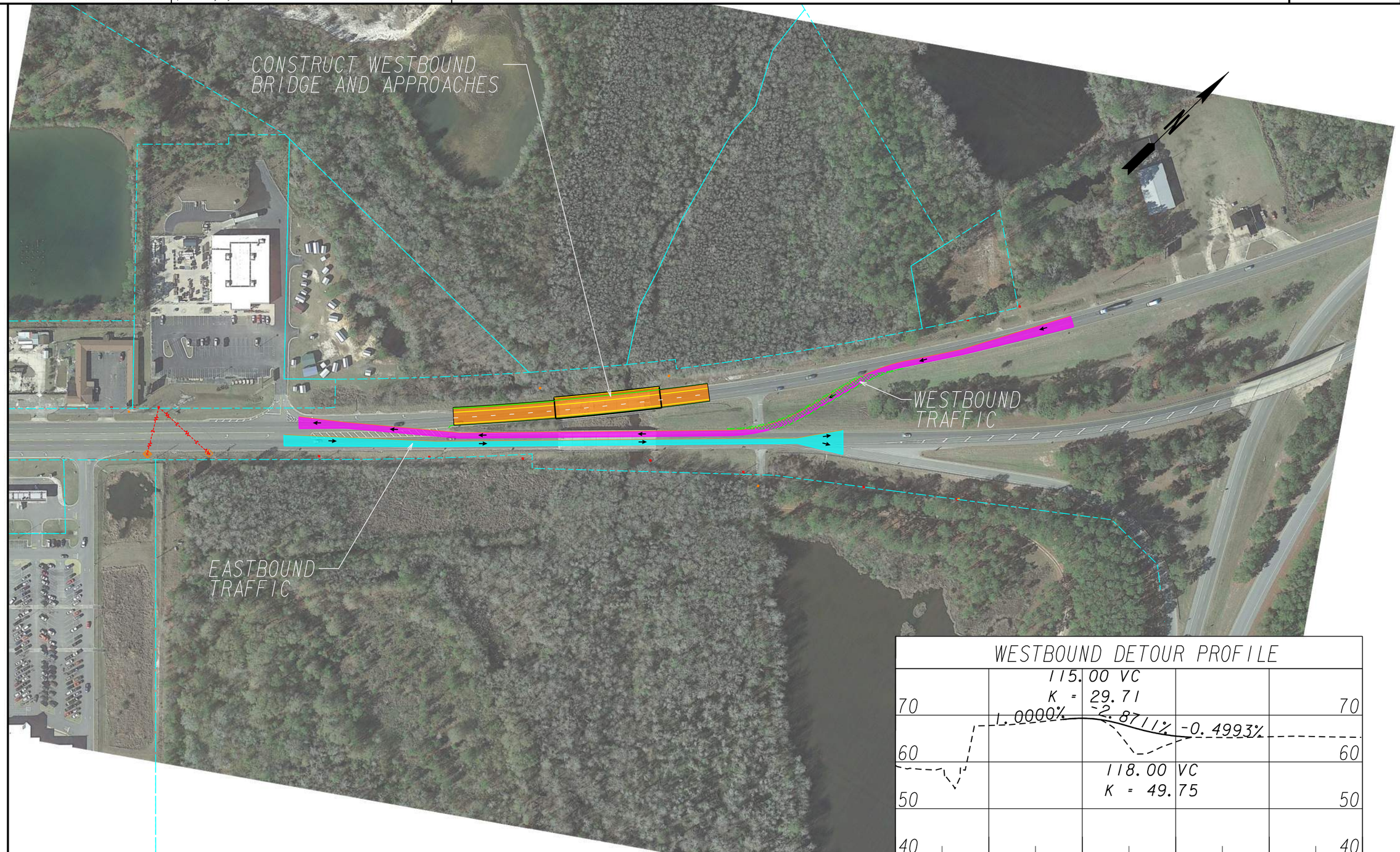
CONCEPT PLAN & LAYOUT

SR 38/US 84 @ LITTLE MCMILLAN CREEK
WAYNE COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

2/23/2018 12:41:50 PM	GPLOT-V8	0013610_STAGING1_LAYOUT.dgn	GDOT	P.I. No.
ALaskoski	Gplot-V81-Highlight.tbl			0013610



ARCADIS Design & Consultancy for natural and built assets

PROGRAM DELIVERY

SCALE IN FEET
0 100 200 400

REVISION DATES

CONCEPT STAGE 1 LAYOUT

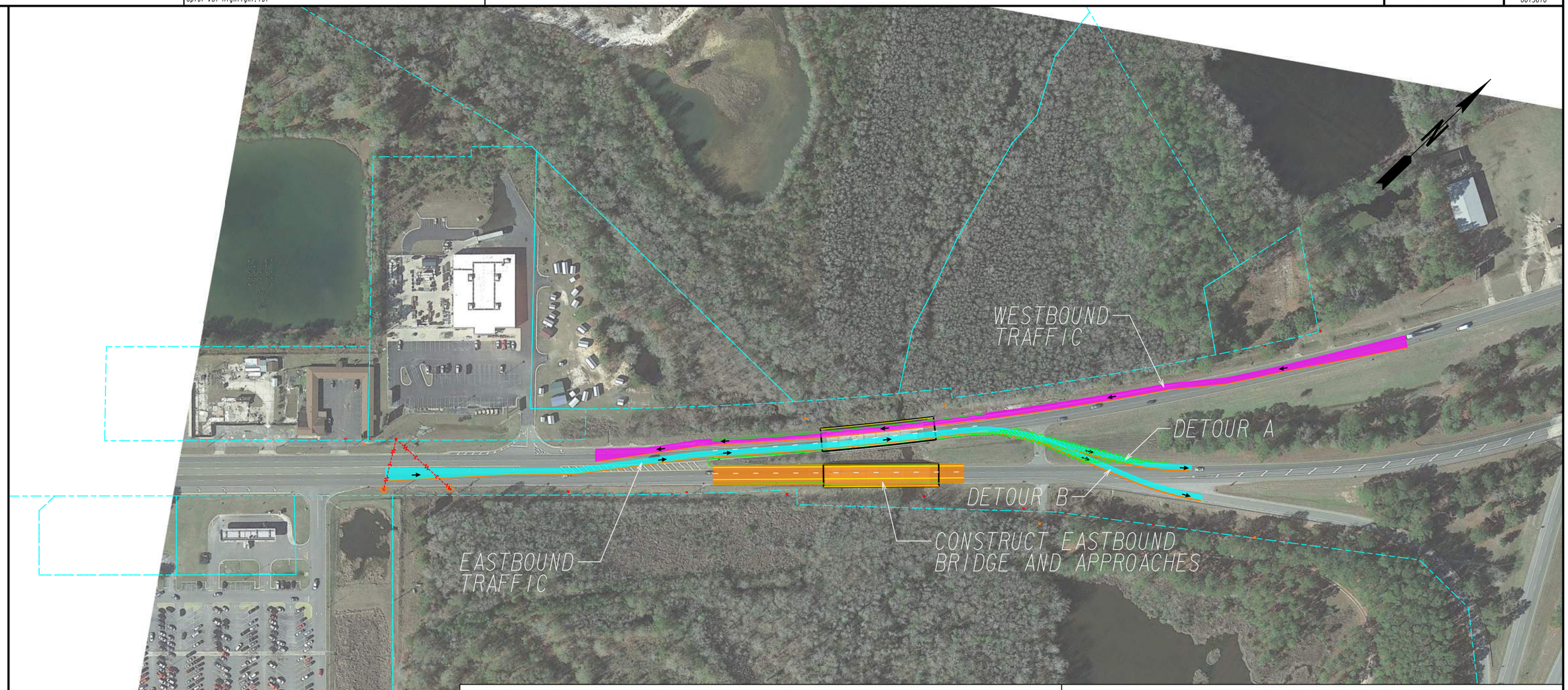
SR 38/US 84 AT LITTLE MCMILLAN CREEK

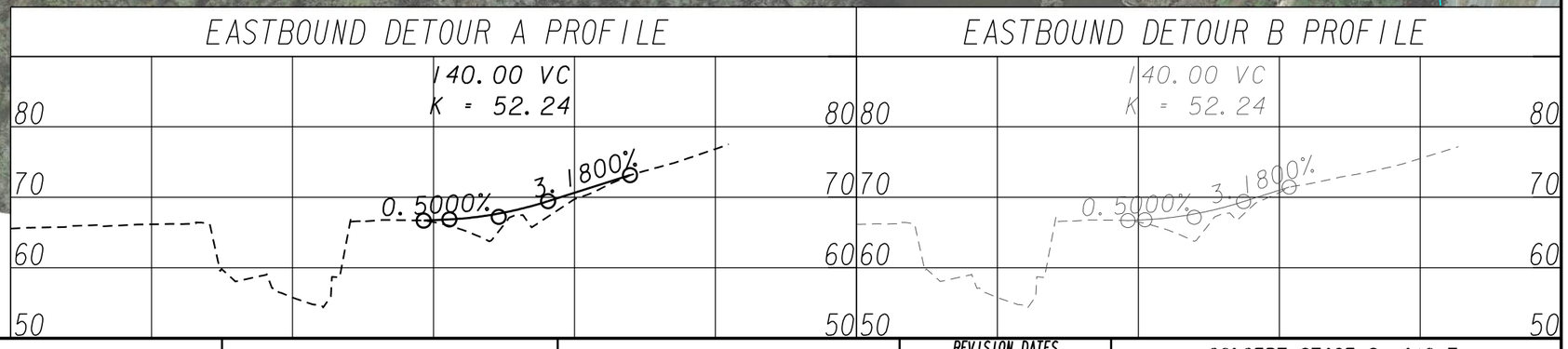
WAYNE COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

2/26/2018 7:59:12 AM ALaskoski	GPLOT-V8 Gplot-V8I-Highlight.tbl	0013610_STAGING2_LAYOUT.dgn	GDOT	P.I. No. 0013610





ARCADIS Design & Consultancy for natural and built assets

PROGRAM DELIVERY

SCALE IN FEET
0 100 200 400

REVISION DATES

CONCEPT STAGE 2 LAYOUT

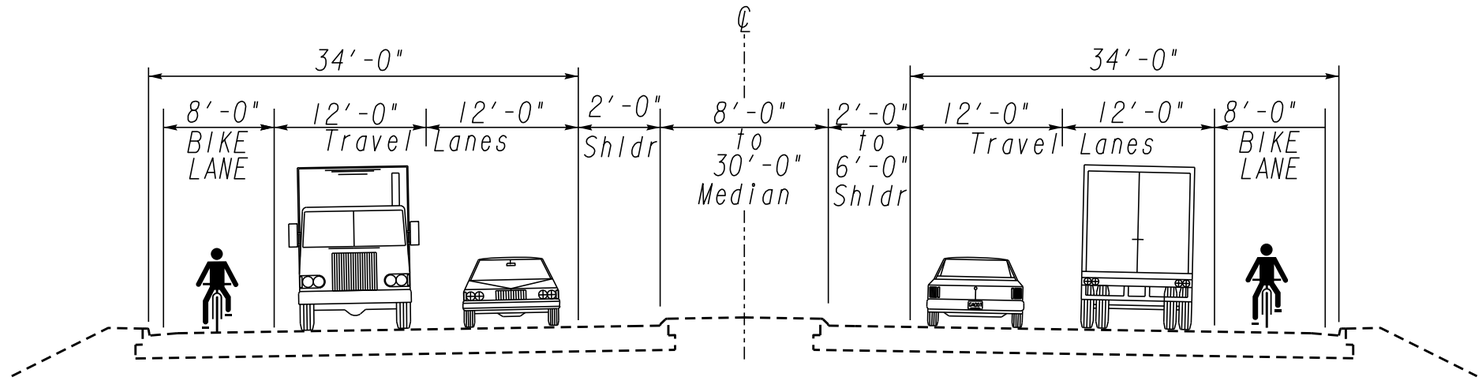
SR 38/US 84 AT LITTLE MCMILLAN CREEK

WAYNE COUNTY

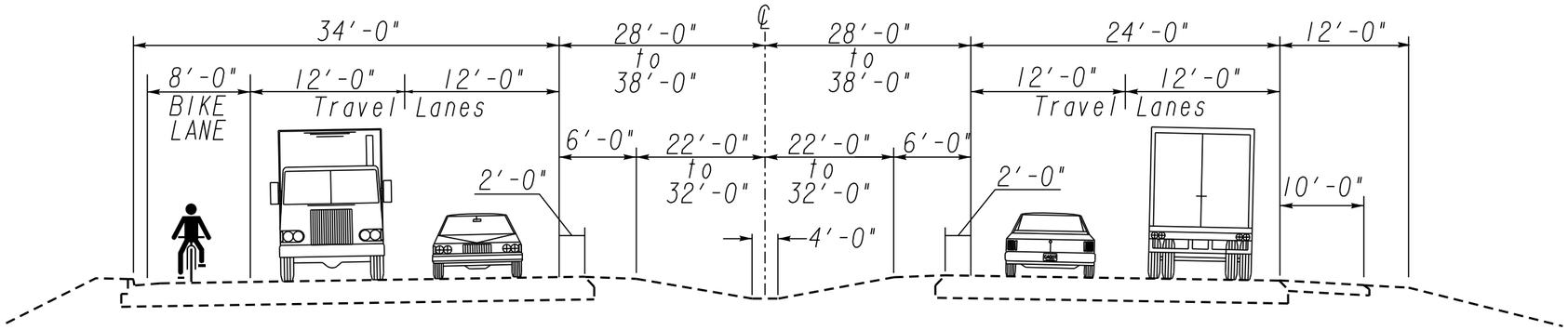
CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

DATE$$$ TIME$$$ $USER$ | $PREF$ $$PENTABLE$$ | DGN | GDOT | P. I. No. 0013610



EXISTING ROADWAY TYPICAL SECTION
(WEST APPROACH)



EXISTING ROADWAY TYPICAL SECTION
(EAST APPROACH)

ARCADIS Design & Consultancy for natural and built assets

PROGRAM DELIVERY

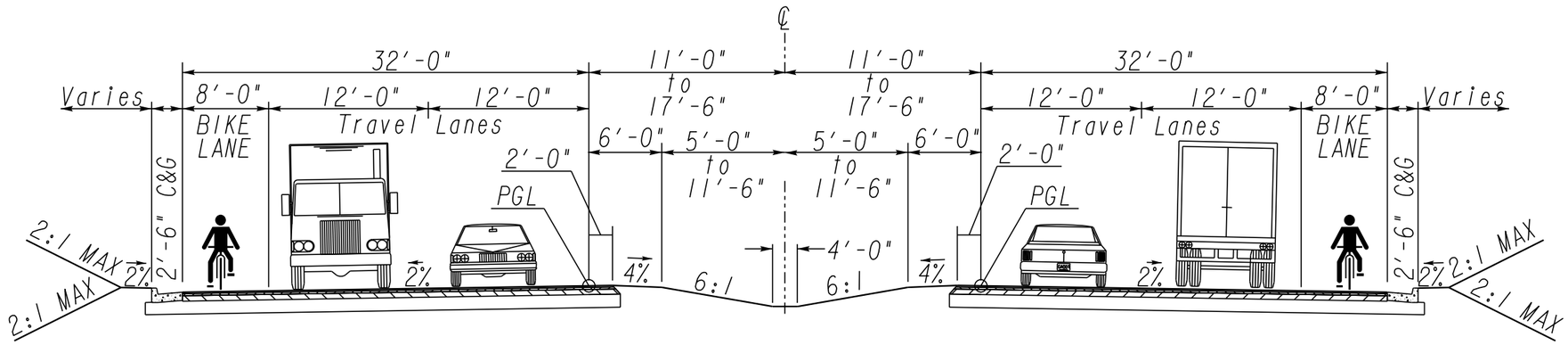
NOT TO SCALE

REVISION DATES		

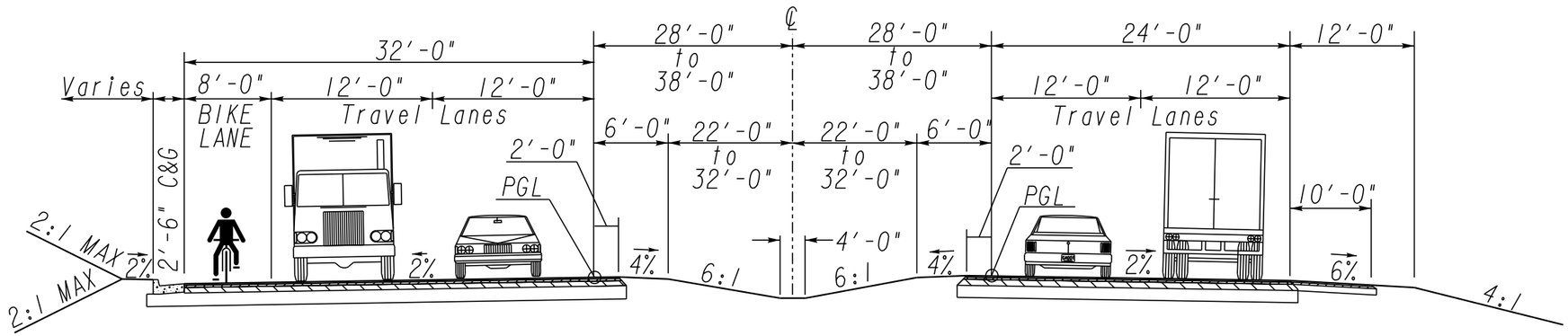
TYPICAL SECTIONS
SR 38/US 84 AT LITTLE MCMILLAN CREEK
WAYNE COUNTY

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		05-001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPOSED ROADWAY TYPICAL SECTION
(WEST APPROACH)



PROPOSED ROADWAY TYPICAL SECTION
(EAST APPROACH)

ARCADIS Design & Consultancy for natural and built assets

PROGRAM DELIVERY

NOT TO SCALE

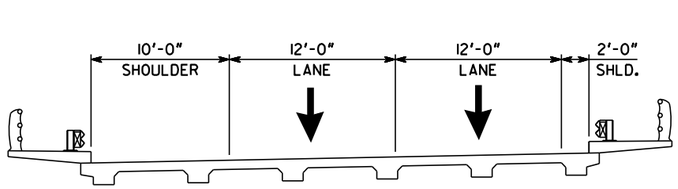
REVISION DATES		

TYPICAL SECTIONS
SR 38/US 84 AT LITTLE MCMILLAN CREEK
WAYNE COUNTY

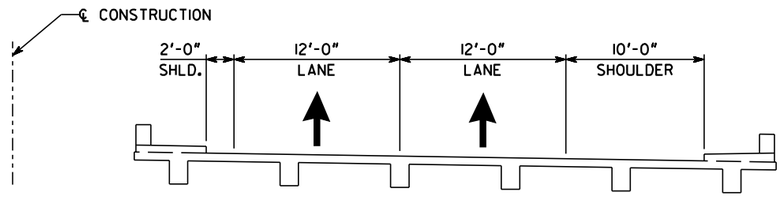
CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		05-002
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLA

P.I. NO. 0013610

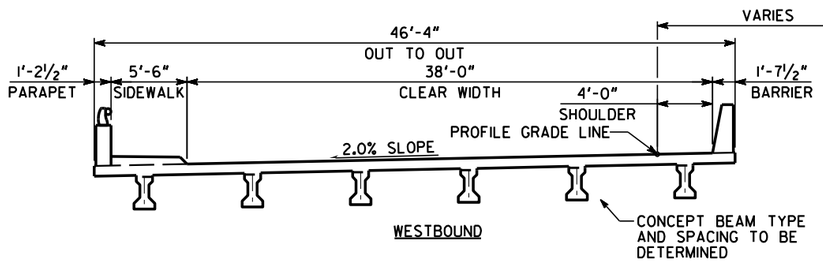


WESTBOUND

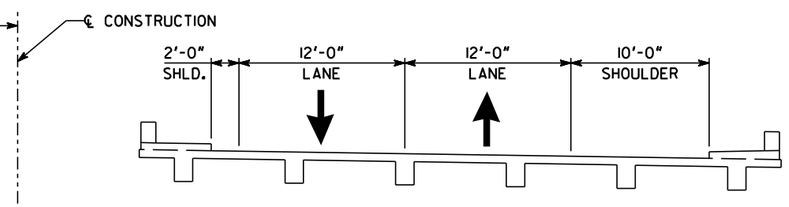


EASTBOUND

EXISTING BRIDGES

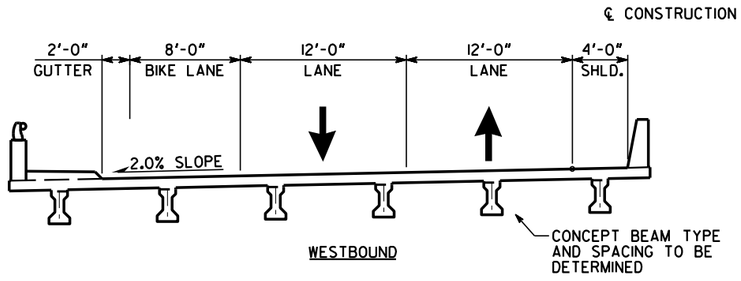


WESTBOUND

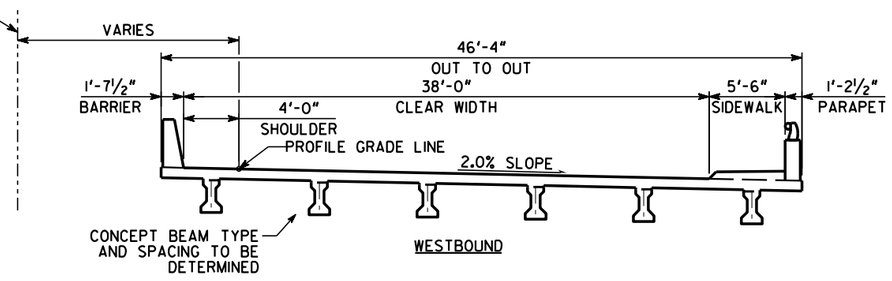


EASTBOUND

STAGE I CONSTRUCTION

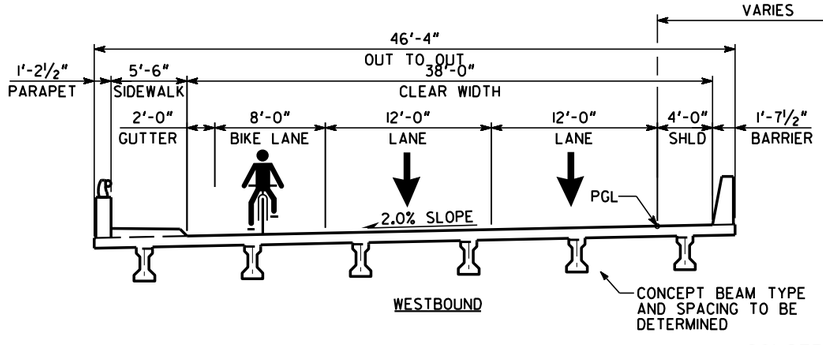


WESTBOUND

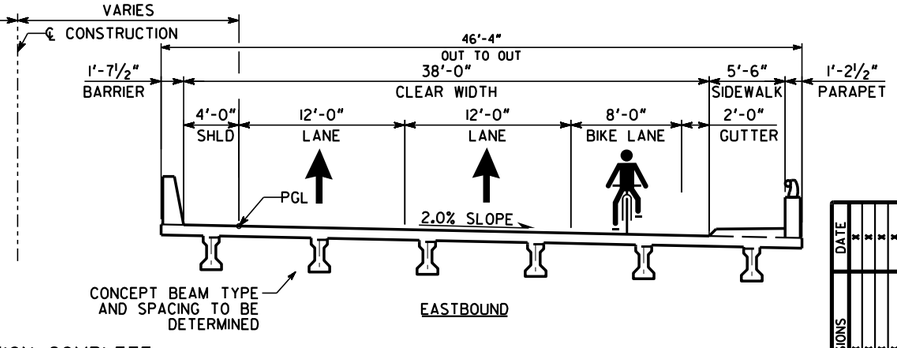


WESTBOUND

STAGE II CONSTRUCTION



WESTBOUND



EASTBOUND

CONSTRUCTION COMPLETE

DGN
TIME: TIME$$
DATE: DATETIME$$
USER: $USER$

ARCADIS
Design & Consultancy for natural and built assets
2400 PACES FERRY ROAD, SUITE 400
ATLANTA, GEORGIA 30339
TEL: 770/431-8666 FAX: 770/435-2666

GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

CONSTRUCTION STAGING CONCEPT
SR 38/ US 84
AT LITTLE MCMILLAN CREEK
WAYNE COUNTY

REVISIONS	BY	DATE

DRAWING NO.
BRIDGE SHEET

SCALE: NOT TO SCALE
DECEMBER 2017

DESIGNED RBW | CHECKED KAK | REVIEWED
DRAWN RBW | DESIGN GROUP | APPROVED

X.DGN

1 INCH WHEN PRINTED FULL SIZE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. **0013610** **OFFICE** Program Delivery

PROJECT DESCRIPTION

SR 38/US 84 @ Little McMillan Creek Bridge PREFERED ALTERNATIVE (ALT 1) - Replacement of Bridges

DATE May 1, 2018

From: Chandria L. Brown, PE

To: Lisa L. Myers, State Project Review Engineer
via Email Mailbox: **CostEstimatesandUpdates@dot.ga.gov**

Subject: REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Brian McHugh

MGMT LET DATE 1/1/2020

MGMT ROW DATE N/R

PROGRAMMED COSTS (TPro W/OUT INFLATION)			**LAST ESTIMATE UPDATE**	
CONSTRUCTION	**$**	4,850,000.00	DATE	
RIGHT OF WAY	**$**	250,000.00	DATE	
UTILITIES	**$**		DATE	

REVISED COST ESTIMATES

CONSTRUCTION*	**$**	6,687,023.52
RIGHT OF WAY	**$**	250,000.00
UTILITIES	**$**	88,000.00

*Cost Contains **15** % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

Concept Report Cost Estimate

CONTINGENCY SUMMARY

A.	**CONSTRUCTION COST ESTIMATE:**	$ 5,511,608.72	Base Estimate From CES		
B.	**ENGINEERING AND INSPECTION (E & I):**	$ 275,580.44	Base Estimate (A) x	5	%
C.	**CONTINGENCY:**	$ 868,078.37	Base Estimate (A) + E & I (B) x	15	%
			See % Table in "Risk Based Cost Estimation" Memo		
D.	**TOTAL LIQUID AC ADJUSTMENT:**	$ 31,755.99	Total From Liquid AC Spreadsheet		
E.	**CONSTRUCTION TOTAL:**	$ **6,687,023.52**	(A + B + C + D = E)		

REIMBURSABLE UTILTY COSTS

UTILITY OWNER	REIMBURSABLE COST
AT&T	
Comcast	
Georgia Power - Distribution	$ 88,000.00
TOTAL	**$ 88,000.00**

ATTACHMENTS: (File Copy in the Project Cost Estimate Folder)

Liquid AC Adjustment Spreadsheet

Preconstruction Status Report

Consultant Validation of Final QC/QA for Construction Cost Estimate Used in This Revision To Programmed Costs

COMPANY NAME:	ARCADIS U.S., INC.

VALIDATION OF FINAL QC/QA

PRINTED NAME:	Umit Seyhan, PhD, MBA, PE
TITLE:	Project Manager
SIGNATURE:	
DATE:	5/1/2018

PROJ. NO.		CALL NO.	0/00/2016
P.I. NO.	0013610		
DATE	5/1/2018		

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Apr-18	$ 2.579
DIESEL		$ 2.920
LIQUID AC		$ 428.00

Link to AC Index:
http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)				**30199.68**	**$ 30,199.68**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	684.80	
Monthly Asphalt Cement Price month project let (APL)			$	428.00	
Total Monthly Tonnage of asphalt cement (TMT)				117.6	

ASPHALT	Tons	%AC	AC ton
Leveling	90	5.0%	4.5
12.5 OGFC		5.0%	0
12.5 mm	620	5.0%	31
9.5 mm SP	0	5.0%	0
25 mm SP	1026	5.0%	51.3
19 mm SP	616	5.0%	30.8
	2352		**117.6**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$**	**1,556.31**	**$ 1,556.31**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	684.80	
Monthly Asphalt Cement Price month project let (APL)			$	428.00	
Total Monthly Tonnage of asphalt cement (TMT)				6.060387401	

Bitum Tack Gals	gals/ton	tons
1411	232.8234	6.0603874

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				**0**	**$ -**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	684.80	
Monthly Asphalt Cement Price month project let (APL)			$	428.00	
Total Monthly Tonnage of asphalt cement (TMT)				0	

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT **$ 31,755.99**

STATE HIGHWAY AGENCY

DATE : 05/01/2018
PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0013610 SPEC YEAR: 13
DESCRIPTION: SR 38/US 84 AT LITTLE MCMULLEN CREEK
BRIDGE REPLACEMENT

ITEMS FOR JOB 0013610

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - PI 0013610	1.000	950000.00	950000.00
0010	210-0100		LS	GRADING COMPLETE - PI 0013610	1.000	560000.00	560000.00
0014	310-1101		TN	GR AGGR BASE CRS, INCL MATL	2462.000	44.08	108545.37
0020	402-1812		TN	RECYL AC LEVELING,INC BM&HL	90.000	108.95	9806.04
0025	402-3130		TN	RECYL AC 12.5MM SP,GP2,BM&HL	620.000	103.95	64449.37
0030	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	1026.000	89.83	92174.21
0035	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	616.000	95.45	58798.03
0040	413-0750		GL	TACK COAT	1411.000	1.74	2460.18
0049	432-5010		SY	MILL ASPH CONC PVMT,VARB DEPTH	2750.000	3.96	10895.64
0050	433-1000		SY	REINF CONC APPROACH SLAB	580.000	170.37	98815.95
0058	441-0104		SY	CONC SIDEWALK, 4 IN	244.000	71.75	17507.42
0064	441-6222		LF	CONC CURB & GUTTER/ 8X30TP2	600.000	45.77	27462.45
0074	641-1100		LF	GUARDRAIL, TP T	120.000	66.92	8031.03
0079	641-1200		LF	GUARDRAIL, TP W	980.000	18.72	18346.11
0084	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	2.000	1087.41	2174.84
0092	641-5020		EA	GUARDRL, ANCHOR, TP 12B,31 IN, FLR, E/A	3.000	2756.02	8268.06
0093	641-5015		EACH	GUARDRL ANCHOR, TP 12A, 31 IN, TANG, E/A	3.000	2777.32	8331.97
0094	668-2100		EA	DROP INLET, GP 1	1.000	2917.49	2917.49
0099	540-1102		LS	REM OF EX BR, BR NO - 305-0018-0 WBL	1.000	336000.00	336000.00
0100	540-1102		LS	REM OF EX BR, BR NO - 305-0017-0 EBL	1.000	338520.00	338520.00
0103	543-9000		LS	CONSTR OF BRIDGE COMPLETE - 305-0017-0 EBL	1.000	1332085.00	1332085.00
0104	543-9000		LS	CONSTR OF BRIDGE COMPLETE - 305-0018-0 WBL	1.000	1332085.00	1332085.00
0109	163-0232		AC	TEMPORARY GRASSING	0.500	276.45	138.23
0114	163-0240		TN	MULCH	12.000	315.44	3785.31
0119	163-0300		EA	CONSTRUCTION EXIT	6.000	1509.75	9058.55
0124	163-0528		LF	CONSTR AND REM FAB CK DAM -TP C SLT FN	900.000	6.95	6255.27
0129	163-0529		LF	CNST/REM TEMP SED BAR OR BLD STRW CK DM	900.000	5.20	4687.70
0134	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	3600.000	0.89	3204.76
0139	165-0041		LF	MAINT OF CHECK DAMS - ALL TYPES	450.000	3.65	1646.87
0144	165-0071		LF	MAINT OF SEDIMENT BARRIER - BALED STRAW	450.000	2.15	968.72

0149	165-0101	EA	MAINT OF CONST EXIT	6.000	584.88	3509.31
0154	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	3.000	460.58	1381.76
0159	167-1500	MO	WATER QUALITY INSPECTIONS	24.000	757.29	18175.10
0164	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	7200.000	4.22	30395.52
0169	643-8200	LF	BARRIER FENCE (ORANGE), 4 FT	2057.000	1.82	3747.94

0174	700-6910	AC	PERMANENT GRASSING	1.000	1368.10	1368.10
0179	700-7000	TN	AGRICULTURAL LIME	5.000	13.67	68.40
0184	700-8000	TN	FERTILIZER MIXED GRADE	1.000	609.78	609.79
0189	700-8100	LB	FERTILIZER NITROGEN CONTENT	120.000	4.09	491.22
0194	716-2000	SY	EROSION CONTROL MATS, SLOPES	10500.000	1.52	15999.48
0198	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	48.000	17.96	862.45
0199	636-2070	LF	GALV STEEL POSTS, TP 7	126.000	8.22	1035.98
0203	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	3.000	99.50	298.53
0204	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	1490.000	0.74	1116.52
0209	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	880.000	0.67	594.00
0214	653-1704	LF	THERM SOLID TRAF STRIPE,24,WH	50.000	8.14	407.29
0215	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	880.000	0.42	371.52
0216	653-6006	SY	THERM TRAF STRIPING, YELLOW	436.000	4.74	2070.69
0220	654-1003	EA	RAISED PVMT MARKERS TP 3	30.000	3.99	119.74
0225	657-1085	LF	PRF PL SD PVT MKG,8,B/W,TP PB	590.000	7.31	4316.32
0230	657-3085	GLF	PRF PL SK PVMT MKG,8,B/W,TPPB	590.000	4.99	2947.12
0235	657-6085	LF	PRF PL SD PVMT MKG,8,B/Y,TPPB	590.000	7.29	4302.37

ITEM TOTAL	5511608.72
INFLATED ITEM TOTAL	5511608.72

TOTALS FOR JOB 0013610

ESTIMATED COST:	5511608.72
CONTINGENCY PERCENT (15.0):	826741.31
ESTIMATED TOTAL:	6338350.03

Original Version: May 24, 2013

Concept Utility Report

Project Number: _____ **District:** 5

County: WAYNE **Prepared by:** BECKY SIMMONS

P.I. # 0013610 **Date:** December 27, 2017

Project Description: SR 38/US 84 @ Little McMullen Creek in Jesup

The information provided herein has been gathered from Georgia811and/or field visits and serves as an estimate. Nothing contained in this report is to be used as a substitute for 1st Submission or SUE.

Are SUE services recommended? NO Level: ☐A ☐B ☐C ☐D

Public Interest Determination (PID): ☐ Automatic ☐ Mandatory ☐ Consideration

☒ No Use ☐ Exempt

Is a separate utility funding phase recommended? NO

Existing Facilities: AT&T, Comcast and Ga. Power-Dist.

Potential Project (Schedule/Budget) Impacts: _____

Capital Improvement Projects (Utilities) Anticipated in the Area: N/A

Project Specific Recommendations for Avoidance/Mitigation: N/A

Right of Way Coordination: N/A

Environmental Coordination: N/A

Additional Remarks: N/A

Original Version: May 24, 2013

The following utilities have facilities within the project limits. Utilities have been located using Georgia811 and/or field visits.

Existing Facilties/Appurtenances	Approximate Limits (Station/Offset)	Reimbursable cost (est.)	Non-reimbursable cost (est.)	Facilities to Avoid (Station/Offset)
AT&T		$0.00	$14,250.00	
Comcast		$0.00	$14,250.00	
Ga. Power - Dist.		$88,000.00		

Arcadis U.S., Inc.
2410 Paces Ferry Road, Suite 400
Atlanta, Georgia 30339

MEMORANDUM TO: Justin Banks
Georgia Department of Transportation, Office of Program Delivery

FROM: Umit Seyhan, PE
Arcadis U.S., Inc. (Arcadis)

DATE: March 5th, 2018

SUBJECT: Design Traffic for PI#0013610, Wayne County, SR 38/US 84 at Little McMillen Creek in Jesup

Arcadis is furnishing Traffic Assignments for the above project as follows:

BRIDGE-ID 305-0017-0 (EB) & 305-0018-0 (WB)

No Build = Build	2017 (Existing Year)	2022 (Base Year)	2024 (Base Year +2)	2042 (Design Year)	2044 (Design Year + 2)
AADT	13,000	13,350	13,450	14,750	14,850
DHV (AM/PM)	780/1040	800/170	810/1080	880/1175	890/1190
K% (AM/PM)	6.0%/ 8.0%	Same as Existing Year			
D% (AM/PM)	50.5%/52.0%				
24 HR. T% - S.U.	11.5%				
24 HR. T% - COMB.	9.5%				
24 HR. T% - TOTAL	21.0%				
T% - S.U. (AM/PM)	11.0%/ 11.5%				
T% - COMB. (AM/PM)	9.0%/ 7.0%				
T% - TOTAL (AM/PM)	20.0%/ 18.5%				

If you have any questions concerning this information please contact Umit Seyhan, PE at Umit.Seyhan@arcadis.com or at 770-384-6615.

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:10/12/2017

Parameters: Bridge Serial Number

Bridge Serial Number: 305-0017-0 **County: Wayne** **SUFF. RATING: 79.4**

Location & Geography		218 Datum:	0- Not Applicable
Structure ID:	305-0017-0	*19 Bypass Length:	1
200 Bridge Information:	06	*20 Toll:	3- On a Free Road or Non-Highway
*6 Feature Intersected:	LITTLE McMULLEN CREEK	*21 Maintenance Responsibility:	01-State Highway Agency.
*7A Route Number Carried:	SR00038	*22 Owner:	01-State Highway Agency.
*7B Facility Carried:	US 84 (EBL)	*31 Design Load:	6- HS 20 + Mod (2-24,000# Axles @ 4ft Ctrs., when they govern)
9 Location:	IN CITY LIMITS OF JESUP	37 Historical Significance:	5- Not eligible for the National Register of Historic Places
2 GDOT District:	4841500000 - D5 District Five Jesup	205 Congressional District:	001
*91 Inspection Frequency:	24 Date: 04/19/2017	27 Year Constructed:	1971
92A Fracture Critical Insp. Freq:	0 Date: 02/01/1901	106 Year Reconsrtucted:	0
92B Underwater Insp Freq:	0 Date: 02/01/1901	33 Bridge Median:	1-Open
92C Other Spc. Insp Freq:	0 Date: 02/01/1901	34 Skew:	0
* 4 Place Code:	42268	35 Structure Flared:	No
*5A Inventory Route(O/U):	1	38 Navigation Control:	0- Navigation is not controlled by an Agency
5B Route Type:	2 - U.S. Numbered	213 Special Steel Design:	0- Not applicable or other
5C Service Designation:	1- Mainline	267A Type Paint Super Structure:	0- Not Applicable. Year : 0000
5D Route Number:	00084	267B Type Paint Sub Structure:	0- Not Applicable Year : 0000
5E Directional Suffix:	0. Not applicable	*42A Type of Service On:	5-Highway-Pedestrian
*16 Latitude:	31 - 37.2132	*42B Type of Service Under:	5-Waterway
*17 Longtitude:	81 - 52.2336	214A Movable Bridge:	0
98A Border Bridge:	0 98B: GA% 00	214B Operator on Duty:	0
99 ID Number:	000000000000000	203 Type Bridge:	D - Concrete pile. O. Concrete O. Concrete O. Concrete
*100 STRAHNET:	2- The Feature is on a Non-Interstate STRAHNET route.	259 Pile Encasement:	3
12 Base Highway Network:	Yes	*43A Structure Type Main material:	1-Concrete
13A LRS Inventory Route:	3051003800	*43B Structure Type Main Type:	4-Tee Beam
13B Sub Inventory Route:	0	45 Number of Main Spans:	8
101 Parallel Structure:	R. Right structure of parallel bridges	44 Structure Type Approach:	A:0- Other B: 0- Other
*102 Direction of Traffic:	1- One Way	46 Number of Approach Spans:	0
*264 Road Inventory Mile Post:	16.95	226 Bridge Curve:	A: Vertical: NoB: Horizontal: No
*208 Inspection Area:	Area 05	111 Pier Protection:	N - Navigation Control item coded 0, or Feature not a waterway
*104 Highway System:	1-Inventory Route is on the NHS	107 Deck Structure Type:	1 - C-I-P Portland Cement Concrete - Epoxy Coated Rebars
*26 Functional Classification:	14- Urban - Other Principal Arterial	108A Wearing Surface Type:	1. Concrete
*204A Federal Route Type:	F - Primary.	108B Membrane Type:	8. Unknown
*204B Federal Route Number:	00263	108C Deck Protection:	8. Unknown
105 Federal Lands Highway:	0. Not applicable	265 Underwater Inspection Area:	0
*110 Truck Route:	0- The Feature is not part of the National Network for Trucks		
217 Benchmark Elevation:	0000.00		
* Location ID No:	305-00038D-017.02E		

Signs & Attachments	
225 Expansion Joint Type:	02- Open or sealed concrete joint (silicone sealant).
242 Deck Drains:	1- Open Scuppers.
243A Parapet Location:	3- Both sides.
243B Parapet Height:	2.00
243C Parapet Width:	1.00
238A Curb Height:	0.5
238B Curb Material:	1- Concrete.
239A Handrail Left:	7- Aluminum.
239B Handrail Right:	7- Aluminum.
*240 Median Barrier Rail:	0- None.
241A Bridge Median Height:	0
241B Bridge Median Width:	0
*230A Guardrail Location Direction Rear:	3- Both sides.
*230B Guardrail Location Direction Fwrd:	0- None.
*230C Guardrail Location Opposing Rear:	0- None.
*230D Guardrail Location Opposing Fwrd:	0- None.
244 Approach Slab:	3- Forward and Rear.
224 Retaining Wall:	0- None.
233 Posted Speed Limit:	45
236 Warning Sign:	No
234 Delineator:	Yes
235 Hazard Boards:	No
237A Gas:	00- Not Applicable
237B Water:	00- Not Applicable
237C Electric:	00- Not Applicable
237D Telephone:	00- Not Applicable
237E Sewer:	00- Not Applicable
247A Lighting: Street:	No
247B Navigation:	No
247C Aerial:	No
*248 County Continuity No.:	00
36A Bridge Railings:	2- Inspected feature meets acceptable construction date standards.
36B Transition:	2- Inspected feature meets acceptable construction date standards.
36C Approach Guardrail:	1- Meets current standards
36D Approach Guardrail Ends:	2- Inspected feature meets acceptable construction date standards.

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:10/12/2017

Bridge Serial Number: 305-0017-0

County: Wayne

SUFF. RATING: 79.4

Programming Data

201 Project Number:	F-85 (7) CT.2
202 Plans Available:	4- Plans in InfoImage.
249 Proposed Project Number:	00000000000000000000000000
250A Reconstruction Approval Status:	No
250B Route Approval Status:	No
250C Approval Status Definition:	0
250D Approval Status Federal:	0
251Project Identification Number:	0013610
252 Contract Date:	02/01/1901
260 Seismic Number:	00000
75A Type Work Proposed:	0- Not Applicable
75B Work Done by:	0- Initial Inventory
94 Bridge Improvement Cost:(X$1,000)	$00
95 Roadway Improvement Cost: (X$1,000)	$0
96 Total Improvement Cost: (X$1,000)	$0
76 Improvement Length:	0.0'
97 Year Improvement Cost Based On:	1900
114 Future AADT:	27645
115 Future AADT Year:	2031

Hydraulic Data

113 Scour Critical:	U. No Load Rating; no scour critical data entered.
216A Water Depth:	02.1
216B Bridge Height:	09.1
222 Slope Protection:	1
221A Spur Dike Rear:	
221B Spur Dike Fwd:	
219 Fender System:	0- None.
220 Dolphin:	
223A Culvert Cover:	000
223B Culvert Type:	0- Not Applicable
223C Number of Barrels:	0
223D Barrel Width:	0.0
223E Barrel Height:	0.0
223F Culvert Length:	0.0
223G Culvert Apron:	0
39 Navigation Vertical Clearance:	0'
40 Navigation Horizontal Clearance:	0
116 Navigation Vertical Clear Closed:	0

Measurements:

*29 AADT:	18430
*30 AADT Year:	2011
109 % Truck Traffic:	9
* 28A Lanes On:	2
*28B Lanes Under:	0
210A Tracks On:	00
210B Tracks Under:	0
* 48 Maximum Span Length:	26
* 49 Structure Length:	208
51 Bridge Roadway Width:	36.0'
52 Deck Width:	46.6'
* 47 Total Horizontal Clearance:	36.0'
50A Curb / Sidewalk Width Left:	4.0
50B Curb / Sidewalk Width Right:	4.0
32 Approach Rdwy. Width:	29.0'

***229 Approach Roadway**

Rear Shoulder Left: Width:	2.5	*Right Width:*2.5	Type: 2 - Asphalt.
Fwd Shoulder: Left Width:	4	*Right Width:*10.0	Type: 3 - Asphalt and Concrete.
Rear Pavement: Width:	24.0	*Type:*2- Asphalt.	
Forward Pavement: Width:	24.0	*Type:*2- Asphalt.	
Intersection Rear:	1	*Forward:*1	

53 Minimum Vertical Clearance Over Rd:	99' 99"
54A Under Reference Feature:	N- Feature not a highway or railroad.
54B Minimum Clearance Under:	0' 0"

***228 Minimum Vertical Clearance**

228A Actual Odometer Direction:	99'99"
228B Actual Opposing Direction:	99'99"
228C Posted Odometer Direction:	00'00"
228D Posted Opposing Direction:	00'00"
55A Lateral Underclearance Reference:	N- Feature not a highway or railroad.
55B Lateral Underclearance on Right:	0.0
56 Lateral Underclearance on Left:	0.0
10A Direction of Travel for Max Min:	0
10B Max Min Vertical Clearance:	99'99"
245A Deck Thickness Main:	7.0
245B Deck Thickness Approach:	0.0
246 Overlay Thickness:	0

Ratings and Posting

65 Inventory Rating Method:	1-Load Factor (LF)
63 Operating Rating Method:	1-Load Factor (LF)
66A Inventory Type:	2 - HS loading.
66B Inventory Rating:	22
64A Operating Type:	2 - HS loading.
64B Operating Rating:	37

231Calculated Loads		**Posting Required**
231A H-Modified:	19	No
231B Type3/Tandem:	20	No
231C Timber:	28	No
231D HS-Modified:	26	No
231E Type 3S2:	32	No
231F Piggyback:	40	No

261 H Inventory Rating:	16
262 H Operating Rating:	27
67 Structural Evaluation:	5
58 Deck Condition:	7 - Good Condition
59 Superstructure Condition:	6 - Satisfactory Condition
* 227 Collision Damage:	
60A Substructure Condition:	7 - Good Condition
60B Scour Condition:	8 - Very Good Condition
60C Underwater Condition:	N - Not Applicable
71 Waterway Adequacy:	8-Equal to present desirable criteria.
61 Channel Protection Cond.:	7-Better than present minimum criteria.
68 Deck Geometry:	6
69 UnderClr. Horz/Vert:	N
72 Approach Alignment:	8-No reduction of vehicle operating speed required.
62 Culvert:	N - Not Applicable
70 Bridge Posting Required:	5. Equal to or above legal loads
41 Struct Open, Posted, CL:	A. Open, no restriction
* 103 Temporary Structure:	No

232 Posted Loads

232A H-Modified:	00
232B Type3/Tandem:	00
232C Timber:	00
232D HS-Modified:	00
232E Type 3s2:	00
232F Piggyback:	00
253 Notification Date:	02/01/1901
258 Federal Notify Date:	02/01/1901

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:10/12/2017

Parameters: Bridge Serial Number

Bridge Serial Number: 305-0018-0 **County: Wayne** **SUFF. RATING: 48.9**

Location & Geography

Structure ID:	305-0018-0
200 Bridge Information:	06
*6 Feature Intersected:	LITTLE McMULLEN CREEK
*7A Route Number Carried:	SR00038
*7B Facility Carried:	US 84 (WBL)
9 Location:	IN CITY LIMITS OF JESUP
2 GDOT District:	4841500000 - D5 District Five Jesup
*91 Inspection Frequency:	24 Date: 04/19/2017
92A Fracture Critical Insp. Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	0 Date: 02/01/1901
92C Other Spc. Insp Freq:	0 Date: 02/01/1901
* 4 Place Code:	42268
*5A Inventory Route(O/U):	1
5B Route Type:	2 - U.S. Numbered
5C Service Designation:	1- Mainline
5D Route Number:	00084
5E Directional Suffix:	0. Not applicable
*16 Latitude:	31 - 37.2216
*17 Longtitude:	81 - 52.2438
98A Border Bridge:	0 98B: GA% 00
99 ID Number:	000000000000000
*100 STRAHNET:	2- The Feature is on a Non-Interstate STRAHNET route.
12 Base Highway Network:	Yes
13A LRS Inventory Route:	3051003800
13B Sub Inventory Route:	0
101 Parallel Structure:	L. Left structure of parallel bridges
*102 Direction of Traffic:	1- One Way
*264 Road Inventory Mile Post:	16.96
*208 Inspection Area:	Area 05
*104 Highway System:	1-Inventory Route is on the NHS
*26 Functional Classification:	14- Urban - Other Principal Arterial
*204A Federal Route Type:	F - Primary.
*204B Federal Route Number:	00263
105 Federal Lands Highway:	0. Not applicable
*110 Truck Route:	0- The Feature is not part of the National Network for Trucks
217 Benchmark Elevation:	0070.46
* Location ID No:	305-00038D-017.03E

218 Datum:	2- Mean Sea Level
*19 Bypass Length:	1
*20 Toll:	3- On a Free Road or Non-Highway
*21 Maintenance Responsibility:	01-State Highway Agency.
*22 Owner:	01-State Highway Agency.
*31 Design Load:	5- HS 20
37 Historical Significance:	5- Not eligible for the National Register of Historic Places
205 Congressional District:	001
27 Year Constructed:	1957
106 Year Reconsrtucted:	0
33 Bridge Median:	1-Open
34 Skew:	0
35 Structure Flared:	No
38 Navigation Control:	0- Navigation is not controlled by an Agency
213 Special Steel Design:	0- Not applicable or other
267A Type Paint Super Structure:	0- Not Applicable. Year : 0000
267B Type Paint Sub Structure:	0- Not Applicable Year : 0000
*42A Type of Service On:	5-Highway-Pedestrian
*42B Type of Service Under:	5-Waterway
214A Movable Bridge:	0
214B Operator on Duty:	0
203 Type Bridge:	D - Concrete pile. O. Concrete O. Concrete O. Concrete
259 Pile Encasement:	3
*43A Structure Type Main material:	1-Concrete
*43B Structure Type Main Type:	4-Tee Beam
45 Number of Main Spans:	8
44 Structure Type Approach:	A:0- Other B: 0- Other
46 Number of Approach Spans:	0
226 Bridge Curve:	A: Vertical: NoB: Horizontal: No
111 Pier Protection:	N - Navigation Control item coded 0, or Feature not a waterway
107 Deck Structure Type:	1 - C-I-P Portland Cement Concrete - Epoxy Coated Rebars
108A Wearing Surface Type:	1. Concrete
108B Membrane Type:	8. Unknown
108C Deck Protection:	8. Unknown
265 Underwater Inspection Area:	0

Signs & Attachments

225 Expansion Joint Type:	02- Open or sealed concrete joint (silicone sealant).
242 Deck Drains:	1- Open Scuppers.
243A Parapet Location:	0- None present.
243B Parapet Height:	0.00
243C Parapet Width:	0.00
238A Curb Height:	0.8
238B Curb Material:	1- Concrete.
239A Handrail Left:	7- Aluminum.
239B Handrail Right:	7- Aluminum.
*240 Median Barrier Rail:	0- None.
241A Bridge Median Height:	0
241B Bridge Median Width:	0
*230A Guardrail Location Direction Rear:	6- Both sides, approach and continuous.
*230B Guardrail Location Direction Fwrd:	6- Both sides, approach and continuous.
*230C Guardrail Location Opposing Rear:	0- None.
*230D Guardrail Location Opposing Fwrd:	0- None.
244 Approach Slab:	3- Forward and Rear.
224 Retaining Wall:	0- None.
233 Posted Speed Limit:	45
236 Warning Sign:	No
234 Delineator:	Yes
235 Hazard Boards:	No
237A Gas:	00- Not Applicable
237B Water:	00- Not Applicable
237C Electric:	00- Not Applicable
237D Telephone:	21- Bottom Left.
237E Sewer:	00- Not Applicable
247A Lighting: Street:	No
247B Navigation:	No
247C Aerial:	No
*248 County Continuity No.:	00
36A Bridge Railings:	2- Inspected feature meets acceptable construction date standards.
36B Transition:	2- Inspected feature meets acceptable construction date standards.
36C Approach Guardrail:	1- Meets current standards
36D Approach Guardrail Ends:	2- Inspected feature meets acceptable construction date standards.

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:10/12/2017

Bridge Serial Number: 305-0018-0

County: Wayne

SUFF. RATING: 48.9

Programming Data

201 Project Number:	F-026-3 (3)
202 Plans Available:	4- Plans in InfoImage.
249 Proposed Project Number:	000000000000000000000000
250A Reconstruction Approval Status:	No
250B Route Approval Status:	No
250C Approval Status Definition:	0
250D Approval Status Federal:	0
251Project Identification Number:	0013610
252 Contract Date:	02/01/1901
260 Seismic Number:	00000
75A Type Work Proposed:	0- Not Applicable
75B Work Done by:	0- Initial Inventory
94 Bridge Improvement Cost:(X$1,000)	$00
95 Roadway Improvement Cost: (X$1,000)	$0
96 Total Improvement Cost: (X$1,000)	$0
76 Improvement Length:	0.0'
97 Year Improvement Cost Based On:	1900
114 Future AADT:	27780
115 Future AADT Year:	2032

Hydraulic Data

113 Scour Critical:	U. No Load Rating; no scour critical data entered.
216A Water Depth:	00.2
216B Bridge Height:	09.2
222 Slope Protection:	1
221A Spur Dike Rear:	
221B Spur Dike Fwd:	
219 Fender System:	0- None.
220 Dolphin:	
223A Culvert Cover:	000
223B Culvert Type:	0- Not Applicable
223C Number of Barrels:	0
223D Barrel Width:	0.0
223E Barrel Height:	0.0
223F Culvert Length:	0.0
223G Culvert Apron:	0
39 Navigation Vertical Clearance:	0'
40 Navigation Horizontal Clearance:	0
116 Navigation Vertical Clear Closed:	0

Measurements:

*29 AADT:	18520
*30 AADT Year:	2012
109 % Truck Traffic:	1
* 28A Lanes On:	2
*28B Lanes Under:	0
210A Tracks On:	00
210B Tracks Under:	0
* 48 Maximum Span Length:	25
* 49 Structure Length:	200
51 Bridge Roadway Width:	35.7'
52 Deck Width:	48.0'
* 47 Total Horizontal Clearance:	35.7'
50A Curb / Sidewalk Width Left:	5.0
50B Curb / Sidewalk Width Right:	5.0
32 Approach Rdwy. Width:	29.0'

***229 Approach Roadway**

Rear Shoulder Left: Width:	4	*Right Width:*2.5	Type: 1 - Concrete.
Fwd Shoulder: Left Width:	2.5	*Right Width:*2.5	Type: 3 - Asphalt and Concrete.
Rear Pavement: Width:	24.0	*Type:*2- Asphalt.	
Forward Pavement: Width:	24.0	*Type:*2- Asphalt.	
Intersection Rear:	1	*Forward:*1	

53 Minimum Vertical Clearance Over Rd:	99' 99"
54A Under Reference Feature:	N- Feature not a highway or railroad.
54B Minimum Clearance Under:	0' 0"

***228 Minimum Vertical Clearance**

228A Actual Odometer Direction:	99'99"
228B Actual Opposing Direction:	99'99"
228C Posted Odometer Direction:	00'00"
228D Posted Opposing Direction:	00'00"
55A Lateral Underclearance Reference:	N- Feature not a highway or railroad.
55B Lateral Underclearance on Right:	0.0
56 Lateral Underclearance on Left:	0.0
10A Direction of Travel for Max Min:	0
10B Max Min Vertical Clearance:	99'99"
245A Deck Thickness Main:	7.0
245B Deck Thickness Approach:	0.0
246 Overlay Thickness:	0

Ratings and Posting

65 Inventory Rating Method:	1-Load Factor (LF)
63 Operating Rating Method:	1-Load Factor (LF)
66A Inventory Type:	2 - HS loading.
66B Inventory Rating:	21
64A Operating Type:	2 - HS loading.
64B Operating Rating:	36

231Calculated Loads		**Posting Required**
231A H-Modified:	21	Yes
231B Type3/Tandem:	21	Yes
231C Timber:	37	Yes
231D HS-Modified:	30	No
231E Type 3S2:	40	No
231F Piggyback:	40	No

261 H Inventory Rating:	15
262 H Operating Rating:	25
67 Structural Evaluation:	4
58 Deck Condition:	4 - Poor Condition
59 Superstructure Condition:	4 - Poor Condition
* 227 Collision Damage:	
60A Substructure Condition:	5 - Fair Condition
60B Scour Condition:	8 - Very Good Condition
60C Underwater Condition:	N - Not Applicable
71 Waterway Adequacy:	8-Equal to present desirable criteria.
61 Channel Protection Cond.:	8-Equal to present desirable criteria.
68 Deck Geometry:	5
69 UnderClr. Horz/Vert:	N
72 Approach Alignment:	8-No reduction of vehicle operating speed required.
62 Culvert:	N - Not Applicable
70 Bridge Posting Required:	4. 0.1 - 9.9% below
41 Struct Open, Posted, CL:	P. Posted for load
* 103 Temporary Structure:	No

232 Posted Loads

232A H-Modified:	21
232B Type3/Tandem:	21
232C Timber:	37
232D HS-Modified:	00
232E Type 3s2:	00
232F Piggyback:	00
253 Notification Date:	02/01/1901
258 Federal Notify Date:	02/01/1901

RECORD OF MEETING

ARCADIS Design & Consultancy for natural and built assets

Subject:

TO #2 - SR 38/US 84 at Little McMillan Creek Bridge Replacement (PI No. 0013610, Wayne County) Initial Concept Team Meeting

Arcadis Project No.:

Arcadis U.S., Inc.
2410 Paces Ferry Road
#400
Atlanta
Georgia 30339
Tel 770 431 8666
Fax 770 435 2666
www.arcadis.com

Meeting Location:

GDOT District 5 Office
GDOT Program Delivery
Conference Room 25th Floor

Participants:

See sign-in sheets

Copies:

Meeting Date:

December 19, 2017

Minutes by:

Umit Seyhan

Issue Date:

December 21, 2017

The purpose of this meeting was to discuss project concerns, coordination, and schedule as they relate to the initial concept design process. The following is a summary of the items discussed.

- Amy Laskoski (Arcadis) discussed the following items:
    - Project background including:
        - Project information
        - Project description
    - Existing bridge conditions
    - Existing roadway facilities
    - Project justification
    - Project challenges/known conditions
    - Design features
    - Utilities
    - Environmental resources and anticipated permits
        - Jillian Neupauer (Arcadis) brought up that the draft concept report currently states that a PIOH will be needed however; if the preferred alternative is selected there will be no detour and no there is no known public controversy. As such, this can be revised in the concept report to state that no PIOH will be required.
    - Additional alternatives considered
    - Other project items

- Questions/comments
    - Troy Pittman, GDOT Preconstruction, asked why sidewalks were being proposed on both sides of the bridge. Umit responded that it is based on the bridge design manual. If it is in the city limits, sidewalks need to be put on both sides. Troy responded that he doesn't anticipate foot traffic on the inside shoulders of the bridge. Umit indicated that he will get confirmation from GDOT Bridge Department if the inside sidewalks can be eliminated. Troy also stated that he did not see a problem with closing the westbound bridge and detouring eastbound, but asked when eastbound is closed, how traffic getting on the bypass would be handled. Umit responded there would be crossover before the bypass. He stated that there are elevation differences between EB and WB lanes and that should be considered during the detail design to see it the crossover can be utilized. Umit agreed that the elevation issue will be considered during the preliminary design.
    - Brian McHugh asked if Alternative 1 had been decided on. Umit indicated that even EB and WB are closed to traffic with utilizing off-site detours, the contractor will demolish and build bridges one at a time which is same as with the current preferred alternative. Therefore, closing the traffic on both direction will not reduce the construction duration and might have a minimal cost saving while the current alternative at least has one lane open to traffic in each direction which will eliminate the user cost during the construction. Umit confirmed that this was the preferred alternative unless other attendees felt otherwise.
- Brian McHugh asked if there were any issues with elevating this meeting to the concept team meeting as opposed to the initial concept team meeting. The consensus is that there is no issue.

ACTION ITEMS

1. Arcadis to revise PIOH requirement in the concept report

PI Nos. 0013599, 0013610, 0013715 concept team meetings
12/19/2017

Sign-In Sheet

ARCADIS Design & Consultancy for natural and built assets

Name	Company	Phone	email
Jillian Neupauer	Arcadis	7038460595	jillian.neupauer@arcadis.com
Amber Barlow (all 3 PIs)	GDOT-NEPA	(4)631-1167	abarlow@dot.ga.gov
Steve Gaston (PI 0013599 only)	GDOT-Bridge	404-631-1881	sgaston@dot.ga.gov
Darren Wilton	Moffatt & Nichol	404-205-8534	dwilton@moffattnichol.com
Scott Caples	Moffatt & Nichol	404-205-8536	scaples@moffattnickol.com

Sign-In Sheet

ARCADIS Design & Consultancy for natural and built assets

PI0013610 Concept Team Meeting - District 5 Conf. Room
December 19, 2017

Name	Company	Phone	email
Greg Wasdin	G-DOT - Utilities	912-530-4468	gwasdin@dot.ga.gov
Byron Cowart	GDOT - D5 Planning	912-530-4453	bcowart@dot.ga.gov
JOEY WHITE	AGL	912-239-6508	JOSEWHIT@SOUTHERNCO.com
Timothy WILLIAMS	GDOT-A3 CONSTR.	912 424-9296	tiwilliams@dot.ga.gov
J. Cory Knox	GDOT DIST CONST	424 8975	cknox@dot.ga.gov
Umit SEYHAN	Arcadis	404 643 7414	Umit.seyhan@arcadis.com
9 am → WALLY ORREL	McIntosh County IDA	912-437-6659	Wally@mcintoshga.com
10 am → Becky Simmons	GDOT Utility	912-530-4399	bsimmons@dot.ga.gov
10 am → Faheem Muhammad	GDOT Traffic Ops	912 530 4402	Fmuhammad@dot....
Troy PITTMAN	G-DOT Pre Const.	912 782 3980	tpittman@dot.ga.gov
Umit SEYHAN			

Sign-In Sheet

ARCADIS Design & Consultancy for natural and built assets

PI0013610 Concept Team Meeting - District 5 Conf. Room
December 19, 2017

Name	Company	Phone	email
BRIAN MCHUGH	GDOT OPD	404 514 4882	bmchugh@dot.ga.gov
Brandon McDaniel	GDOT Const.	(912)424-9385	bmcdaniel@dot.ga.gov
JEROME SHEFFIELD	GDOT CONST.	912-237-3800	
KOREY MURRAY	GDOT CONST.	(912) 530-4390	murrayko@dot.ga.gov
Adam Poppell	Mc Co Atty	912 223 4470	apoppell@doriantal.net
Patrick Zoucks	McIntosh County Manager	912-269-0267	patrick.zoucks@mcintoshcounty-ga.gov
SHAWN JORDAN	MCINTOSH. Deputy Co. manager	912 266-5618	SHAWN.JORDAN@MCINTOSHCOUNTY-GA.GOV.
NEIL DUBBERLY	GDOT	912-530-4396	N.DUBBERLY@DOT.GA.GOV
9 am → Leslie Dubberly	GDOT	912-531-4404	ldubberly@dot.ga.gov
10 am →			
TROY PITTMAN	GDOT PE CONST	912 282 5880	tpittman@dot.ga.gov